own arrangement of transport to reach PAU Ludhiana. Free accommodation in the Parker House of PAU Ludhiana and boarding (food) will be provided during the training programme. The local candidates are not eligible for boarding and lodging, however, they will be provided local hospitality (lunch, tea, snacks etc.).

**How to Apply**

Interested candidates should apply online by registering at CBP portal (http://cbp.icar.gov.in) latest by 22nd May 2017. Hardcopy of successfully submitted online form and application filled in prescribed format along with Demand Draft of Rs. 50/- (non-refundable) drawn in favour of Comptroller, PAU Ludhiana payable at Ludhiana should be sent to Course Director though proper channel latest by 25th May, 2017. The list of the selected participants will be conveyed to the applicants through e-mail. In case of any query, please contact Course Director.

**Important dates:**

- Last date for receipt of application : 22.05.2017
- Intimation of selection : 25.05.2017
- Confirmation of participation by candidates : 26.05.2017

Note: Only selected candidates will be intimated through e-mail which they should reply promptly with firm acceptance and travel plans.

**All correspondence may kindly be addressed to**

**Dr M.I.S. Gill**  
Course Director  
Head  
Department of Fruit Science  
PAU Ludhiana-141004  
E-mail: misgill@pau.edu  
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**Course Coordinators**

Dr Harminder Singh  
Senior Horticulturist  
harminder@pau.edu  
Ph. 8146444554

Dr Anirudh Thakur  
Asstt Professor of Horticulture  
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Ph. 8146269999

**Application form for Participation in Summer School “Technological advances for enhancing productivity of horticultural crops”, 07-27 June, 2017 (To be sent to the Course Director)**

1. Full name (in blockletters):
2. Designation:
3. Present employer and address:
4. Address for correspondence (Give E-mail, Tel. / Mobile No.):
5. Permanent address:
6. Date of birth:
7. Sex: Male/Female
8. Marital status: Married/unmarried
9. (a) Teaching/research/professional experience :  
(b) Present area of research and number of publications:
10. Mention if you have participated in any Summer/ Winter School/ Short Course etc. during previous years under ICAR / any other organization (Give details of course, organizers, duration/ dates/year etc.):
11. Registration fee of Rs. 50/- (DD ............... dated............ (in favour of Comptroller, PAU Ludhiana) (Nonrefundable)
12. Academic record (Indicate in tabular form examinations passed B.Sc. degree onwards

<table>
<thead>
<tr>
<th>Examination passed</th>
<th>Subject</th>
<th>Year of passing</th>
<th>Class</th>
<th>University</th>
<th>Other information</th>
</tr>
</thead>
</table>

13. Relevance of training to applicant’s present academic and research activities:
14. Signature of applicant (indicate name, place and date):
15. Recommendation of the forwarding Institute (Signature with date, designation/address):

**CERTIFICATE**

It is certified that the above information was furnished as per the office record and was found correct.

(Signature and Designation of the sponsoring authority with Seal)
Background

Horticulture has provided food security and livelihood to millions of people around the world. It has an immense potential in improving nutrition, providing opportunities for diversification; and improving economic and social status of farmers. In India, there are around 76 per cent small and marginal farms that contribute to one third of cropped area. Out of the 194 million hectares area under agriculture which is the principal source of livelihood to 58 per cent of Indian population, only 7.98 per cent is under fruits and vegetables but, contributing around 30% in the GDP of agriculture. The horticulture production in India (280.9 m tons) has surpassed the food grain production (251.12 m tons) in the recent past. Vegetable crops contributed highest production share of 60.3% in the total horticulture production of the country, followed by fruits (30.8%), plantation crops (5.6%), spices (2.2%), flowers (0.6%) and aromatic crops (0.4%).

The Government of India has envisioned “Doubling farmers income by year 2022” and horticulture and its allied sectors has the potential to enhance the income from small and marginal farms. The horticultural crops have lesser demand for water and other inputs besides being more remunerative than field crops. This can increase savings by reduction of water pumping costs; reduce leaching of nutrients, save fertilizers and ground water pollution. The horticultural crops due to high value are more amenable to precision farming and protected cultivation. Hence, it has a role in employment generation to young educated entrepreneurs who can make good profits with horticulture even from small holdings.

Objective

The objective of the proposed summer school is to impart conceptual and practical training to agricultural scientists on wide range of short and long term technological aspects related to horticulture and allied fields viz. fruit crops, vegetable crops, ornamental crops, water and nutrient efficient technologies, value addition, protected cultivation, beekeeping, cooperative farming, marketing and export for enhancing the productivity of horticultural crops.

Course Contents

- Production of quality planting material of horticultural crops
- Biotechnological advances for enhancing quality and production of horticultural crops
- Breeding new fruit varieties for sustained production
- Application of MAS in fruit and vegetable breeding
- High density planting and canopy architecture in fruit crops
- Role of rootstocks in enhancing fruit production
- Application of nanotechnology in horticultural crops
- Enhancing water and fertilizer use efficiency in fruit crops
- Use of poor quality water for production of horticultural crops
- Protected cultivation of horticultural crops
- Offseason flower production
- Commercial apiculture and fruit production
- Round the year mushroom production
- Organic Horticulture
- Ecofriendly pest management in horticultural crops
- Horticultural crop insurance and protection from weather vagaries
- Cooperative farming and market intelligence for enhanced income from horticultural crops
- Export marketing of horticultural produce
- Supply chain management for higher market returns
- Value addition in horticultural crops

Eligibility

The candidates should possess Master’s degree in Agriculture or Horticulture. The candidate should not be below the rank of Assistant Professor and equivalent working in Agricultural Universities/ICAR Institutes and relevant universities/organizations are eligible to apply. Only 25 participants will be selected for the course by the screening committee as per ICAR guidelines. The decision of the selection committee will be final and no correspondence in this regard will be entertained.

Host City

Ludhiana is a popular industrial city of India, located on the bank of river Sutlej and is centrally located on the map of Punjab. Ludhiana is located 100 km west from state capital Chandigarh on NH 95 and is centrally located on National Highway-1 from New Delhi to Amritsar; and is well connected to New Delhi by road, frequent train service and by air. The city is famous for its hosiery and textiles, bicycle and sewing machine industry.

Weather

The weather during the summer school will be generally hot. The expected temperature may range between 38°C to 42°C.

Travel, Boarding and Lodging

Participants will be paid travel (to and fro) fare by rail restricted to AC-II tier or by bus as per their entitlement. Actual TA for the shortest route will be paid on production of the tickets. Participants are requested not to bring their spouse or any family members as there is no scope for their accommodation. If you still want to bring them then you yourself need to arrange their accommodation outside PAU campus at your own cost. Participants are requested to make his/her